



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,444	07/22/2003	Steven John Monks	P00888	1443

3017 7590 11/01/2004

BARLOW, JOSEPHS & HOLMES, LTD.
101 DYER STREET
5TH FLOOR
PROVIDENCE, RI 02903

EXAMINER

RICHARDSON, JOHN A

ART UNIT	PAPER NUMBER
----------	--------------

3641

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,444

Applicant(s)

MONKS ET AL.

Examiner

John Richardson

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 10,22 and 25-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-21,23-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07-22-2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Non Final Rejection

1). Applicant's election without traverse of group I in the reply filed on August 09 2004 is acknowledged. Claims 25-33 have been cancelled. In addition, the applicant's attorney, David Josephs, further elected species A in a telephone conversation on October 26 2004.

2). Claims 10, 22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply in telephone call dated October 26 2004.

3). The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3641

4). The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5). The disclosure is objected to because of the following informalities:

- Figure 4a, and paragraph [0029] of the specification, denotes two items as item 35, namely, **a magnet and an optical sensor.**
- Paragraph [0030] sites **item 37** as being **a manifold** which does not comport with the Figure 6 depiction in this respect (see also paragraph [0031]).
- **The applicant is required to review all the items shown in Figures 1-12 for consistency with the specification disclosure identifications.**

Appropriate correction is required.

6). Claims 1 to 4, 11 to 16, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Stevens (U.S. 6,109,252).

The reference discloses a paintball firing apparatus comprising a frame (item 72), a electronic grip (item 83), a movable trigger (item 90) connected to said frame, said trigger including an optical sensor (items 92, 94) interface for sensing the condition of

Art Unit: 3641

the said trigger position (see for example, Column 3, lines 3-10), electrical output circuit (item 93) with a plurality signals connected to the said sensors with a first signal sensing the presence of a paintball within the breach (item 76) of the said firing apparatus, and a second signal the condition of the firing mechanism (item 90), and a signal controlling a motor (item 10) as generally disclosed in Column 5, lines 47-57, Column 6, lines 53+, Column 7, lines 1-9, the reference discloses a gas source of supply to the said firing mechanism (Column 1, lines 7-23), relating to claims 2-3, 14-15, the reference discloses a prong on the rear face of the said trigger as shown in Figures 19, 20, relating to claim 4, 13, 16, the reference discloses optical sensors (items 92, 94, and as disclosed in Column 3, lines 3-10) for operating and controlling the said electrical circuit (item 93), relating to claims 11, 23, the reference discloses the said trigger pivotally connected to the said frame as shown in Figure2 19-20.

7). Claims 1, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Thanasack et al (U.S. 6,171,190).

The reference discloses a gun firing apparatus comprising a frame (item 14) and trigger (item 26) connected to a photo-sensor (item 24), the operating of the said trigger resulting a first trigger signal and second signal to an internal circuit as disclosed in Column 5, lines 38-65, and a computer system as disclosed in items 12, 30, and Column 5, lines 50+.

Art Unit: 3641

8). Claims 1, 5-9, 12, 17-21, 23 to 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Surawski et al (U.S. 4,793,085) in view of Stevens (U.S. 6,109,252) and Thanasack et al (U.S. 6,171,190).

The primary reference discloses an electronic firing system that reads on the applicant's cited claims, comprising a frame (item 10), a hand grip (item 20), a trigger (item 14), movably connected to said frame and pivoted upon pin (item 50), a trigger switch circuit (Column 4, lines 33+, Column 5, lines 1-25) causing a plurality of electrical signals to actuate a solenoid (item 114) and producing a rearward movement of an armature winding (item 114a), the reference discloses a sear (item 78) and a solenoid connected thereto (item 114), relating to claims 5-9, 17-20, the reference discloses a trigger mechanism encompassing the feature being claimed in the form of adjustable stop by means of the trigger bar (item 48) providing for a plurality of stop positions (see Figure 3), a biasing magnet (item 80), a set screw (item 50) and as disclosed in Column 3, lines 7-63), and relating to claims 9, and 21, the reference discloses a metal construction by stating **brazing** manufacture (Column 2, lines 59+).

The primary reference discloses the claimed invention except for citing that the trigger sensors are of the optical type and that the system uses a microprocessor to actuate a gas system to propel the paint-balls. The secondary references teach that it is well known in the firearm art to use optical type trigger sensors and microprocessors to actuate a gas system to propel the paint-balls. It would have been obvious to one of ordinary skill in the art to have substituted the Surawski et al sensors with optical type sensors as the examiner takes Official Notice that Stevens teaches that these are

Art Unit: 3641

recognized equivalents as stated in Stevens (Column 3, lines 3-10), and in addition the use of micro-processors to actuate gas propelling systems is taught by Thanasack et al as disclosed in items 12, and 30 in order to provide a processing means for processing electrical signals from photo-sensitive devices (see Column 3, lines 31-44).

9). The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10). Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Richardson whose telephone number is (703) 305 0764. The examiner can normally be reached on Monday to Thursday from 7.00 AM to 4.30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306 4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 3641

published applications can be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <[http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov)>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John Richardson, PE,

October 27 2004.


SUPERVISORY PATENT EXAMINER